



PRIME MINISTER'S OFFICE



## **Finland's competence, openness and renewability**

Summary of the final report of the 'Finland in the Global Economy' project

1 December 2004



## ***Globalization is driven by liberalization of world trade and technological change***

Globalization refers to the integration of the world economy, mainly characterized by rapid growth in flows of trade, capital and technology between countries. Globalization also has considerable cultural and political ramifications. The globalization report focuses on exploring how Finnish production and work can succeed in circumstances that have changed and are continuing to change rapidly.

Globalization is driven by two underlying forces, technological change and the removal of obstacles to world trade and the movement of capital. Technological change increasing overall productivity forms the foundation for economic growth. It has also decreased the cost of capital, product and production factor movement, reducing the importance of geographical distance. Technological advancement has enabled the manufacturing of completely new types of product and the introduction of new production technologies.

The most significant impacts of globalization and the associated pressures to adapt affect the developing countries: they gain access to modern technology, wider markets and foreign capital. Globalization also affects developed countries in many ways due to market expansion, increased competition and a reorganization of production into a worldwide network.

Since the mid-1990s, major shifts have occurred in the geographical distribution of production. After the Second World War, Europe produced almost one third of the world's entire industrial output; today, the figure is only slightly over one tenth. By comparison, the share accounted for by eastern Asia (China, Japan, India) has risen from one tenth to more than one third.

The internationalization of services is a new and growing phenomenon in the global economy. The development of information and communications technology (ICT) has made it possible for an increasing volume of services to be produced at a distance from where they are actually used. Another of the core features of globalization is a worldwide reorganization of production. Increasingly, companies in developing countries form part of the global production networks of supranational companies. These new modes of production bind the components of the world economy together in an unprecedented manner, more closely than before.

The competitive advantages of a company may be very different from those of any individual country in which it is based. Countries and regions have begun to compete for mobile production factors in a new way, for corporate investments above all, but also for the cutting edge of the labour force. Soliciting investments is not just about increasing production capacity and thereby improving employment; what is also important is that investments boost the level of technology. In other words, investments not only increase production but improve productivity.

The integration of the world economy is a positive thing for the world economy as a whole. It offers enormous potential for poor countries to raise their standard of living and opens huge new markets for competitive developed countries as well as the opportunity to employ a new division of labour.

### ***The new situation is an opportunity for Finland but a serious challenge too***

Like other developed countries, Finland can make use of the growing markets, opportunities related to the division of labour and the mobility of production factors to boost welfare. This, however, requires an economy and a society that are capable of change and can make the best use of their strengths. If Finland is not able to adapt and renew itself, there is a threat of drifting into a vicious circle of high unemployment, slow economic growth and permanent imbalance in public finances.

Translating threats into opportunities calls for a clear-cut strategy. Finland can only succeed in global competition as an economy and society based on a high level of competence. Finland has undeniable strengths in its high educational attainment and largely well-functioning innovation system, which together provide a foundation which can be built on. It is also beneficial that corruption is low and that public finances have been relatively solid in recent years by international standards.

However, Finland has not been able to make full use of its strengths, as can be seen from our rather mediocre success in improving employment and the productivity of the national economy, as well as Finland's low attractiveness for foreign investments and experts. There is thus untapped potential in our economy, which has to be exploited if we are to thrive amid increasing global competition.

Making use of the great opportunities created by globalization requires openness in society. While Finnish companies must be methodically supported in their efforts towards internationalization, we must also attract foreign capital and foreign experts to Finland more determinedly. To succeed in these efforts we need a wide-ranging programme aimed at influencing attitudes so that Finns come to see immigrants as a resource and a richness. We must also ensure that the logistical disadvantages caused by Finland's remote location are alleviated with a good transport infrastructure and by bringing Finland's telecommunications connections back to the top of the world league.

A competence-based strategy requires continuous renewal from the economy. Reforms must apply not only to the weak points of the crucially important education and innovation systems, but also to the functioning of the markets for labour, goods and services and the public sector. Reforms are essential, though not always easy by any means.

A strategy of competence, openness and renewal calls for firm action in many areas. The Report on Finland in the Global Economy contains a compendium of measures, the main points and conclusions of which are the following, organized by theme headings:

#### ***Improve the quality of the education system***

The Finnish education system provides a good basic general education very equitably to all Finns at a level of expenditure that is close to the international average. However, nearly one in four of those leaving comprehensive school or upper secondary school receives no proper vocational or other training; this is a waste of resources from society's point of view, apart from driving a number of young people into a vicious circle of social exclusion. The various degrees of vocational training do not in all respects confer the kind of skills required in

working life; the distribution of training places does not adapt sufficiently quickly to shifts in labour demand.

The growth benefits will not be realized if the system does not also encourage students to pursue vocational and handicraft studies. In addition to increasing the attraction of **vocational education** and enhancing the use of resources, part-integration of upper secondary school and vocational education should aim to reduce the amount of multiple studies. Moreover, it is important to ensure that there are incentives in place in workplaces to encourage continuous improvement of competence. There must be scope for rewarding good, high-competence performance and improvements in one's own competence.

International cutting-edge expertise in Finnish **universities** is threatened with erosion if resources for teaching and basic research cannot be increased in fields of core competence that are of vital national importance. In a global environment, those that succeed best are large or sufficiently specialized teaching and research units networked with other international centres of excellence through concrete cooperation. Enhancing the financial autonomy and incentive-based funding of universities would create substantially better conditions for reaching the international cutting edge and staying there.

It is absolutely necessary to concentrate resources in order to increase the efficiency, quality and international attractiveness of **polytechnic education**. The division of labour between polytechnics, universities and other research organizations must be clarified and cooperation between them enhanced to avoid splintering.

**Vocational adult education** should be strengthened as part of vocational education as a whole. The formation of consolidated vocational institutes would ensure that education providers can provide comprehensive vocational education regionally in an efficient and feasible way. At the same time, overlaps between labour market training and other training could be eliminated and teaching resources shared. The purview of the Employment and Economic Development Centres should be expanded to include education. Increasing local cooperation between Employment and Economic Development Centres and companies would enable the timely and rapid introduction of vocational education as required.

### ***From science and technology policy to innovation policy***

The importance of innovations in the development of business and a competitive business environment is enhanced with the shortening of product lifecycles, the renewing of production structures and the tightening of international competition. Although much has been invested in the innovation system and its results have largely been good, few inventions or innovations generate new enterprises or become successfully commercialized.

In comparison with our strong technological competence, there are obvious shortcomings in competence in early-stage productization and commercialization. Also, there is insufficient capital funding for startup enterprises. There is also much disparity among innovation organizations that channel public corporate funding and business competence, 'bridging organizations' and funding sources.

Research and development forms the basis of any innovation strategy. Although Finland already invests heavily in R&D by international standards, focused additional investment is advisable. **Public R&D resources** must be increased by at least 7% per annum during the current decade. Additional public investments in R&D must be allocated particularly to restoring our technological competitiveness and reinforcing top research in sectors that are vital to the growth of the national economy and to productivity improvement. Funding must also be allocated to areas where shortcomings have been identified, such as business competence, development of customer-oriented and service innovations, supporting growth enterprises, and helping enterprises gain access to international market.

The Government must urgently decide to significantly increase allocations to **capital investment funds** that make pre-seed and seed capital investments in innovative startup enterprises. Cooperation between universities and enterprises to commercialize innovations can be promoted through actions addressing the ownership rights and immaterial rights of research results.

We must shift from science and technology policy to **innovation policy**. It is important to support the emergence of multi-discipline innovation environments and networks and the interaction of organizational and social innovations with technological innovations. A national programme to improve the field of innovation and bridging organizations should be drawn up.

### ***Openness requires a more attractive business environment***

The goal in **foreign investment** must be the attracting of new and growing enterprises to Finland, particularly R&D functions. Studies conducted in Europe show that foreign companies have a largely beneficial effect on the host country economies. Measures to promote investments are important yet secondary when companies consider their investment decisions. The business environment and its development is the key to attracting foreign investment and capital. The functioning of the market has to be improved in the services in particular, and detrimental regulation must be eliminated. Taxation on labour must continue to be cut at all income levels, and the highest marginal tax rates, which act as a disincentive for competence, must also be cut.

Increasing **employment-based immigration** is a vital issue for the continued thriving of the Finnish economy. Because of the ageing of the labour force, labour shortages will increase in the near future, and foreign workers can become a significant resource. This will influence the willingness of companies to invest in Finland and the founding of enterprises in Finland in general. It is important to amend permit procedures so that foreign employees can be hired flexibly.

Strong competence networks must be established for the Finnish **innovation environment** in Europe, the United States and Japan. At the same time, we must develop new networks in emerging technology centres such as China, South Korea and Taiwan. Systematic creation of innovation centres and other networks in emerging markets is an important part of the internationalization of the innovation environment, the transfer of competence and the promotion of foreign investments in Finland.

Finland has a great deal of competence and technology related to **public-sector welfare services** that has never, for various reasons, evolved into anything suitable for export. There is scope for productization not only in higher education but also in medical and health care services and social welfare services, and this should be exploited. This requires a new approach and probably also a reform of organizations and incentive systems. Production organized in separate companies would open up new kinds of opportunities for instance in health care in the form of the export of technologies and processes and perhaps even of the medical and health care services themselves.

Finnish **cultural exports** have numerous strengths, such as high-quality training in creative fields and internationally valued creative production. However, the sector structure in culture is not competitive; more entrepreneurship, business competence and immaterial rights management are needed. In order to make Finland's creative economy internationally competitive, a creative economy and cultural export development programme for 2005-2010 should be drawn up.

It is vital to ensure that our **infrastructure** is of sufficiently high quality to enable us to compensate the increased transport costs caused by our geography. Therefore, it is vital to improve domestic and international transport connections.

### ***Strength in renewability***

**Good productivity development** is of key importance for Finland's competitiveness, economic growth and welfare in the long term. Well-functioning markets for labour, goods and services are closely linked with investment. **Raising the employment rate** to a level clearly higher than the present, to at least the level of the other Nordic countries, is also essential for the funding of the public sector and thus of public welfare services and income transfers. Raising the employment rate requires improvement and renewal of competence, and well-functioning markets for labour, goods and services and a development of the labour market and wage formation in a direction that better supports employment.

A significant increase in the number of innovative enterprises and growth enterprises must be set as the main goal of **business environment policy**; care must be taken to ensure that the needs of these enterprises are methodically taken into account in policy. The Government must approve a comprehensive, long-term **business environment policy** strategy to be prepared under the leadership of the Ministry of Trade and Industry.

Public R&D funding must be increased and focused in order to develop new technology supporting public service production and basic services in particular, and to reform service structures and procedures. In addition to openness, **putting public services out to tender** is also an important way of increasing competition and innovation in the services markets.

Improving the growth potential of the economy and securing the availability of competent labour requires a significant improvement in the productivity of the **public sector**, which requires fundamental changes in procedures, organizations and personnel competence. In the future, service providers will increasingly include private-sector enterprises, so that creating and maintaining a competitive environment by means of public governance will be a

major challenge. New procedures and service structures must be developed and applied in order to safeguard high-quality welfare services. Boosting productivity development requires a realistic nationwide and regional vision about what kind of welfare service network we need, can afford and can achieve.

The service production of central government has been reorganized over the past ten years. Although some central government services have been put out to competition and privatized, there is still much scope for streamlining in the regional and local administration of central government.

An efficient **stock exchange** is particularly important for SMEs in IPOs and in post-issue growth. The requirements for return on investment governing the investments of employment pension institutions must be developed in such a way that they can extend their investment horizon, reduce the tendency to go with the cycle in investments and reduce the systemic risk caused by the similar investment policies of all the institutions. At the same time, risk management and transparency in pension fund investments must be improved. These measures would also provide scope for investment in domestic enterprises.

### ***Developing the ground rules of the labour market***

The impact of the current phase of globalization on the Finnish **labour market** is largely comparable to the impact of the earlier integration trend. As a closed economy opens up, the profitability of various production activities changes. Thus, it is important that the production being transferred abroad is replaced by new jobs in profitable activities in Finland. The labour market must function in such a way that it supports the development of the competence of the labour force to match new duties and guides employees to new jobs as old ones disappear. The production structure shift involved in globalization highlights the need to secure sufficient resources for active labour market policy and particularly for employment exchange.

**Working time flexibility** is an important competition factor in a networked production environment where the demand for labour can fluctuate greatly. Such flexibility is being sought through new institutional arrangements such as working time banks and the increasing use of hired labour.

The level of competence of the labour force as a whole must be raised. Insofar as it is not possible to raise general educational attainment and the level of competence of the labour force, labour costs should adjust so that it is also possible for less able labour to find employment. This can be promoted for instance by narrowing the **tax wedge** with emphasis on the low-income end. In Finland, features such as the household work deduction and the graded reduction in employer contributions to be introduced at the beginning of 2006 are steps in this direction. However, taxation cannot be tailored to solve all labour cost problems.

Adaptation to technological progress, globalization and changes in the education structure of the labour force requires better accounting for differences in productivity development between sectors and companies in wage formation. Wage elements based on productivity and/or profits support increased employment and, in the longer term, increased productivity.

Flexibility of wage formation can be improved on the basis of the existing agreement system by increasing the role of local agreements within the overall wage formation structure.

Because of pressures caused by globalization on the employment of less trained labour, the importance of the **unemployment benefit system** in encouraging re-employment is enhanced. Here, it is important to find solutions to make the present, largely passive unemployment benefit system more active.

The **benefit system** is linked to low-productivity employment mainly through its impact on threshold wages and thus the general wage level. As regards globalization-related pressures, unemployment benefits, other income support systems and early retirement systems are of key importance. It is important for these systems not to constitute a permanent alternative to working, thus causing undue wage pressures and making it difficult to reallocate labour resources. For the employer, the various contributions should be such that they do not encourage discrimination between employees, for instance because of the costs of eventual family leave or ageing.

### ***What work and production will thrive in Finland?***

Success in global competition calls for a high degree of specialization. Specialization strategies can be employed in both new and traditional sectors. The growth of Finland's forest sector, particularly so as to provide employment, is possible especially at cluster interfaces. Machinery and equipment require maintenance, care and expert operation.

The challenge is to disseminate the competence of our internationally strong ICT cluster to other clusters in the form of applications. There is new ICT-enabled business potential at the boundaries between the ICT cluster and older, traditional clusters, such as ambient intelligence and omnipresent networks, software and mobile business, and various service concepts.

Biotechnology exports are expected to increase to over half the turnover in the near future. The domestic market is used in the early stages, but the real growth is to be sought on the world market. Functional foods, environmental protection applications and bioinformatics will have high market potential in the future. Funding and other resources should be allocated to commercially applied sectors where basic research is of the highest quality internationally.

Service companies are increasingly involved in global competition, and thus they themselves must be internationally competitive. This is important for the competitiveness of the national economy as a whole because of the very size of the service sector. The internationalization of service companies is driven by outsourcing, the increasingly multinational nature of customer sectors and companies, the potential of new technology and the emerging large markets.

There is particular growth potential in health care and welfare services, measurement and analysis services, and management and planning services. Health care and welfare services hold great potential for renewal in Finland's national economy. Cooperation between private and public actors can help find solutions that are the most productive, high-quality and sustainable in business terms.



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